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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Dennis L. Panicali and Rene Bernards

185

Serial No.: 092,036 Group Art Unit: ~~153~~

Filed: September 2, 1987

Title: RECOMBINANT POX VIRUS FOR IMMUNIZATION AGAINST TUMOR-ASSOCIATED ANTIGENS

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Honorable Commissioner of Patents and Trademarks, Washington, D.C. 20231, on 5-18-89

Hamilton, Brook, Smith & Reynolds

Joan M. Hughes
Signature

5-18-89
Date

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

The Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231
Attn: Application Branch

Sir:

Pursuant to 37 C.F.R. 1.56 and 1.97-1.99, the following listed items are cited to the Examiner as being

information which, in good faith judgment of the Applicants and the undersigned Attorney, is relevant to the subject matter claimed in the above-identified application.

AL Brown J.P. et al., UK Patent Application GB 2188637A

Brown et al. disclose production of vaccines for treatment of human melanoma based on p97-related peptides. Brown et al. teach use of rDNA methods to insert immunogenic p97 sequences into vaccinia expression vectors. In particular, Brown et al. disclose a vaccinia construct wherein a cDNA p97 coding sequence is ligated to the 7.5K vaccinia promoter. This chimeric gene is introduced into vaccinia virus via in vivo recombination. Brown et al. also disclose various vaccine formulations. This foreign application was published after the filing date of the above-referenced application.

AR Yamamoto, T et al., Nature, 319: 230-234 (1986)

Yamamoto et al. cloned cDNA for c-erb-B-2 messenger RNA propared from MKN-7 cells. They determined the nucleotide sequence of the overall sequence of the c-erb-B-2 gene product.

AS Martin-Zanca, D. et al., Nature, 319: 743-748 (27 February 1986)

These authors cloned cDNA from the human oncogene oncD (human colon carcinoma) and determined its nucleotide sequence. The authors demonstrated that its

oncogenic properties result from a somatic rearrangement that brought together two truncated loci, one a non-muscle tropomyosin, and the other a putative tyrosine specific protein kinase.

AT Nagarajan, L. et al., Proc. Natl. Acad. Sci. USA, 83: 6568-6572 (1986)

Nagarajan et al. isolated the human analog of v-ros, the transforming gene of the avian sarcoma virus UR2. The human analog, designated c-ros, was mapped to the region of human chromosome 6 involved in nonrandom chromosomal breakpoints in specific neoplasias such as ovarian carcinomas and malignant melanoma.

AU Mackett, M. and G.L. Smith, J. Gen. Virol., 67: 2067-2082 (1986)

Mackett and Smith provide a general review of vaccinia vector expression systems.

AV Yarden, Y. et al., EMBO J., 6: 3341-3351 (1987)

Yarden et al. describe and characterize cDNA clones that encode the human c-kit proto-oncogene, the human analogue of the HZ4 feline sarcoma virus oncogene v-kit.

AW Bernards, R. et al., Proc. Natl. Acad. Sci., 84: 6854-6858 (1987)

Bernards et al. disclose construction and use of a recombinant vaccinia virus expressing part of the rat neu

oncogene protein, p 185. This paper was published after the filing date of the present application.

The references are listed on the attached Form PTO-1449 and a copy of each is enclosed for the Examiner's convenience.

Respectfully submitted,

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Dated: 5/18/89
Lexington, Massachusetts